

# INTERNATIONAL SEARCH REPORT

International application No PCT/GB2006/050055
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A. CLASSIFICATION OF SUBJECT MATTER INV. G01S13/72 H03H21/00 ADD. G01S13/87
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According to International Patent Classification (IPC) or to both national classification and IPC
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B. FIELDS SEARCHED
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Minimum documentation searched (classification system followed by classification symbols) G01S H03H
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
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EPO-Internal, INSPEC, WPI Data, PAJ
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C. DOCUMENTS CONSIDERED TO BE RELEVANT
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Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>COATES M: "Distributed particle filters for sensor networks" THIRD INTERNATIONAL SYMPOSIUM ON INFORMATION PROCESSING IN SENSOR NETWORKS ACM NEW YORK, NY, USA, 26 April 2004 (2004-04-26), - 27 April 2004 (2004-04-27) pages 99-107, XP002335206 ISBN: 1-58113-846-6 cited in the application the whole document</p> <p>-----</p> <p style="text-align: center;">-/-</p>	1-11

Further documents are listed in the continuation of Box C.

See parent family annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

\*&\* document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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24 May 2006	13/06/2006
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentzaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer
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Grübl, A
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International application No  
PCT/GB2006/050055

## C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	VAN DER MERWE R ET AL: "Gaussian mixture sigma-point particle filters for sequential probabilistic inference in dynamic state-space models" 2003 IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING. PROCEEDINGS. (ICASSP). HONG KONG, IEEE, US, vol. VOL. 1 OF 6, 6 April 2003 (2003-04-06), - 10 April 2003 (2003-04-10) pages VI701-VI704, XP010640848 ISBN: 0-7803-7663-3 the whole document	1-11
Y	M ROSENCRANTZ, G GORDON, S THRUN: "Decentralized Sensor Fusion with Distributed Particle Filters" PROC. CONF. UNCERTAINTY IN ARTIFICIAL INTELLIGENCE, 7 August 2003 (2003-08-07), XP002335207 Acapulco, Mexico cited in the application the whole document	1-11
Y	SIDENBLADH H: "Multi-target particle filtering for the probability hypothesis density" INFORMATION FUSION, 2003. PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE, PISCATAWAY, NJ, USA, IEEE, vol. 2, 8 July 2003 (2003-07-08), - 11 July 2003 (2003-07-11) pages 800-806, XP010675628 * Chapter 4 *	1-11
Y	TOBIAS M ET AL: "A probability hypothesis density-based multitarget tracker using multiple bistatic range and velocity measurements" SYSTEM THEORY, 2004. PROCEEDINGS OF THE THIRTY-SIXTH SOUTHEASTERN SYMPOSIUM ON ATLANTA, GA, USA MARCH 14-16, 2004, PISCATAWAY, NJ, USA, IEEE, 14 March 2004 (2004-03-14), pages 205-209, XP010703817 ISBN: 0-7803-8281-1 * Chapter IV *	1-11
		-/-

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International application No  
PCT/GB2006/050055

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	MAKARENKO A ET AL: "Decentralized data fusion and control in active sensor networks" SEVENTH INTERNATIONAL CONFERENCE ON INFORMATION FUSION INT. SOC. OF INFORMATION FUSION MOUNTAIN VIEW, CA, USA, vol. 1, 2004, pages 479-486 Vol.1, XP002335208 ISBN: 91-7056-115-X * Chapter 3 *	1-11
A	KOTECHA J H ET AL: "Gaussian sum particle filtering" IEEE TRANSACTIONS ON SIGNAL PROCESSING IEEE USA, vol. 51, no. 10, October 2003 (2003-10), pages 2602-2612, XP002335209 ISSN: 1053-587X abstract	1-11
A	ARULAMPALAM M S ET AL: "A tutorial on particle filters for online nonlinear/non-Gaussian Bayesian tracking" IEEE TRANSACTIONS ON SIGNAL PROCESSING IEEE USA, vol. 50, no. 2, February 2002 (2002-02), pages 174-188, XP002335210 ISSN: 1053-587X cited in the application the whole document	